CONFERENCE ABSTRACT

Designing a Proactive, Person-Centred, Digital Integrated Care System

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ProACT, a Horizon 2020 project, aims to develop a technology ecosystem to support integrated care for older persons with multimorbidity (PwMs). The ecosystem will connect four key models of care and support – 1) homecare (including informal care), 2) hospital care, 3) community and social care 4) social support networks – and will be centred on the person at home self-managing their conditions with support from their care network. The development of a digital platform for integrated care has the potential to support existing practice, and to improve the management of a complex and integrated care plan, introducing new ways of collaboration between key actors.

To understand care pathways for PwMs, we mapped the existing pathways across three EU countries – Ireland and Belgium, where ProACT will be trialled with 60 older adult participants and their care networks at each site, and Italy where a transferability study will take place. We also identified key stakeholders in the care ecosystems and conducted interviews and focus groups with 166 participants (including PwMs and support actors - informal and formal carers, pharmacists and a range of healthcare professionals) across the three countries, in order to understand their needs, requirements, challenges and expectations in relation to the potential use of ProACT.

Some of the major challenges identified in this research involve the lack of standardised, integrated pathways for multimorbidity across the three countries. To better understand pathways for chronic disease management, we reviewed and compared the British NHS NICE pathways for single disease management of the ProACT conditions COPD, CHD, CHF and Diabetes. We adapted these pathways for each of the four ProACT conditions, focusing on those areas of relevance to the patient. We then compared these with existing pathways identified in each region. From this process, we identified 4 important steps within each individual disease pathway, as well as general older adult care pathways. These are:

Diagnosis

Development of a holistic care plan

Management of the medical and social conditions (remaining stable or improving)

Managing exacerbations

These aspects of care will form the basis of ProACT and were further examined during the requirements gathering phase, to identify challenges faced by stakeholders along these pathways and how ProACT might support them. A key intersection where information exchange and service capacity is poorly coordinated and organised will be filled by the ProACT system. Thus, ProACT will collect and analyse data from PwMs and support actors via technology to improve the connections and flow between care delivery locations and improve intelligent decision making support. The outcome will be to increase PwM (and if available informal carers) capacity to inform home-based self-care by directing relevant support actors and services; improve the ability of services to understand the best delivery of care; provide 24/7 real time feedback to key support actors and services; provide information on the PwM at home and in the community. The approach will improve visibility of the PwM's activity to support service delivery.